



State of New Hampshire  
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095

(603) 271-3406 FAX (603) 271-7894  
May 13, 2002



**Letter of Deficiency**  
DAM #109.10

Mr. Joseph Frignon  
Lake Skatutakee Association, Inc  
P.O. Box 148  
Harrisville, NH 03450

RE: Skatutakee Lake Dam, Harrisville

Dear Mr. Frignon:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that plays a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 11, 2001. During this visual inspection and/or file review, the following deficiencies were observed:

At the intersection between the horizontal concrete cap and the upstream sloping concrete cap within 10 to 15 feet of the right abutment, water was entering and exiting out of the stone face of the dam. Additionally, most of the joint along the entire length of the dam is spalled and deteriorated;

2. There were trees growing within 10 feet of the left abutment both upstream and downstream and there was a small tree growing within 5 feet of the right abutment;
3. There was some deterioration of concrete on the top of the gate structure and along the sides of the structure. It should be noted that some of this had been repaired in the past and is now deteriorating further;
4. There was cracking concrete along the upstream face of the right concrete abutment. It should be noted that this concrete was previously patched and appears to be in need of patching once again;
5. In previous inspections there was some seepage noted (first noticed in 1977), approximately 7 feet from the toe of the right concrete abutment. On this date the seepage was not observed near the toe due to the flow through the dam near the top of the downstream stonewall. Assuming that the leak near the base of the dam was flowing, the seep was observed to be clear of fines; and
6. The Emergency Action Plan (EAP) was last update in 1997. The EAP should be updated and tested in 2002.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

**August 1, 2002:**

1. Remove trees growing within 10 feet of the left and right abutment both upstream and downstream;

Letter of Deficiency  
Dam #109.10  
May 13, 2002  
pg. 2

2. Develop a plan to repair the deteriorating concrete during the drawdown in the fall of 2002 in the following locations:
  - a. At the intersection between the horizontal concrete cap and the upstream sloping concrete cap along the entire length of the dam;
  - b. At the top, side and around the entire gate structure;
  - c. At the upstream face of the right concrete abutment;
3. Update and test the EAP. Forward your results to Bethann McCarthy, P.E., the engineer in charge of the EAP program; and

**On a Continuing basis:**

4. Monitor the seepage approximately 7 feet from the toe of the right concrete abutment.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

**COPY**

Dale F. Guinn, P.E.  
Dam Safety Engineer

Attachments DB8, DB13  
cc: Gretchen Rule ✓

Town of Harrisville  
Certified # 7099 3400 0002 9773 7337  
DFG/was/h:/safety/wendy/lod/109-10lod.doc